

## **VEGAN PROTEIN INFORMATION** by Dr. Kelly Martin, B.S., Pharm.D.

Cranberry protein is unique in that it is the only 100% plant protein that contains 25% complete protein including all essential amino acids. Cranberry protein is extracted using cold-pressing technology preserving natural balances and naturally occurring fatty acids, which increases the absorption of the other nutrients.

- Powerful detoxifier and diuretic (flushes out the kidneys)
- Treats bladder, kidney and urinary problems
- Boosts immune system, protecting against influenza and the common cold
- Increases "good" cholesterol (HDL), and reduces "bad" cholesterol (LDL)
- Improves circulation and reduces risk of heart disease
- Helps to relieve stress & depression
- Treats skin conditions such as: acne, dermatitis, psoriasis, burns & wounds
- Also considered one of the best remedies for REDUCING CELLULITE!

A high fiber, low calorie, nutrient dense vegetarian SUPERFOOD, **Peas are also a remarkable source of plant-based proteins and amino acids!** Protein from peas satisfies all FAO essential amino acid requirements. The amino acids found in peas include **Lysine, Arginine, Glutamine, Leucine, Isoleucine & Valine** (Branched Chain Amino Acids - BCAAs)

- Aid muscle tissue maintenance
- Comparable to egg and milk proteins
- BCAAs are higher in pea protein than any other vegetable protein
- Helps restore nitrogen balance after intense physiological stress
- Increases muscle mass while reducing body fat during intense exercise
- Improves vasodilatation and promotes a healthy heart
- Assists in maintaining lean body mass
- Facilitates calcium absorption (promoting healthy bone development in children)
- Boosts the immune system: producing antibodies, hormones, enzymes, collagen, and tissue-repair
- Low in sulfur proteins (sulfur proteins speed up the aging process)
- Increases metabolism and satiety (helping you to feel "full")
- Recent studies show that consuming pea protein results in fewer calories consumed at the next meal.
- Natural tonic for preventing and treating high blood pressure
- Promotes healthy kidney function

### **Rice Protein** [Health benefits of Rice Protein](#) [Rice Protein effect on cholesterol and triglyceride metabolism](#)

Standard cooked rice has a protein content of only 5%-7%. To make concentrated rice protein, whole brown rice is ground into flour, and then mixed with water. Natural enzymes are then added sequentially to break down and separate out the carbohydrates and fibers from the protein portion of the slurry. Since the process is enzyme based, temperature must be kept low to preserve the enzyme activity levels. Low temperature and chemical free processing prevents the denaturing of amino acids, as is seen in soy and dairy processing. The end product is 80-90% pure, hypoallergenic, easily digested protein. After four hours, the body digests over 86% of all ingested rice protein, compared with about 57% for soy. In the end, rice protein has a biological value of between 70-80, a net protein utilization of about 76, and a total absorption ration of some 98%.

Note: rice protein is high in the amino acids cysteine and methionine, but tends to be low in lysine, which negatively impacts its bioavailability. If you can raise its lysine levels, you can dramatically increase its bioavailability.



## Pea Protein

When it comes to perception, more people have a problem with the "idea" of pea protein than with rice protein. But in fact, pea protein has a very mild, pleasantly sweet taste. It's one of the better tasting proteins. Pea protein is the concentrated natural protein fraction of yellow peas. The process used for concentrating pea protein is water based, making the end product very "natural."

### The Beneficial Combination of Rice and Pea Proteins

As mentioned above, rice protein is high in cysteine and methionine, but tends to be low in lysine. Yellow pea protein, on the other hand, tends to be low in the sulfur containing amino acids, cysteine and methionine -- but high in lysine. The bottom line is that when used in combination, rice protein and yellow pea protein offer a Protein Efficiency Ratio that begins to rival dairy and egg -- but without their potential to promote allergic reactions. In addition, the texture of pea protein helps smooth out the "chalkiness" of rice protein. Like rice protein, it is hypoallergenic and easily digested.

On a different note, the rice/pea combo also has a nice branch chain amino acid profile -- only slightly less than whey.

	Whey	Rice/Pea
<b>Leucine (percent of total)</b>	8	7
<b>Isoleucine (percent of total)</b>	6	4
<b>Valine (percent of total)</b>	5	4

A commonly asked question is when the best time to take the supplement: pre, post, or at rest. Traditionally, a person wants quick absorb post workout, and slow absorb before bed and during the day. The underlined statement above tells us Arbonne is best used immediately after workout when you want your body sucking up protein for recovery and rebuilding, plus it is a protein that is easy for your system to digest especially with the quality ingredients that Arbonne is committed to and lack of chemicals. Post workout might even be better if you mix a Non-Dairy milk (Non-Dairy sources - Almond, Coconut, or Rice Milk).

### RISKS OF WHEY PROTEIN:

- **Protein Concerns** Can protein supplements cause harm? Some protein supplements can cause **aminoacidemia**, a condition that leads to diabetes. Some protein supplements can cause gas, bloating, acne, or digestive distress. Some people have no problem with any protein source, however, 50 million Americans have dairy reactions, 109 million Americans have blood sugar concerns, and 12 million Americans have food allergies.
- **Whey is High in Cholesterol** Whey tends to be very high in cholesterol. This is a major concern for any health-conscious consumer or athlete that is trying to push their body to its ultimate potential.
- **Immunogenicity** – The lacto globulin that whey protein contains causes a wide variety of allergy symptoms from sinus infections to upper respiratory mucus. Can potentially increase incidence of autoimmune disease. Companies can add enzymes for the lactose-intolerant, but there is nothing you can do if you are allergic to the large proteins found in whey. [<http://lib.bioinfo.pl/pmid:11729348>]
- **Absorption** – many studies are now showing that the rapid rate at which whey is absorbed taxes the kidneys and liver significantly. Can see fatty liver and kidney stones from the amount of ammonia that circulated in the blood stream. Utilization of the protein decreases significantly.
- **Contaminants** – from antibiotics, puss, and steroids to heavy metals.... see attached sheet. Organic whey is only addressing this area of concern.

## Whey Contributes To Aminoacidemia

Aminoacidemia may sound like a disease, but it's not. It is a condition in which excessive amounts of amino acids are present in the blood. If there is nothing in the diet, for example, to account for it, it could be indicative of missing or defective enzymes in the liver, which are essential for the breakdown of nitrogen-containing amino acids in the body. If a body can't sufficiently break down amino acids, it can lead to generalized hyper-aminoacidemia, and ultimately to neurotoxicity and early death.

For years bodybuilders have claimed that excess amino acids dumped quickly into the bloodstream is a helpful condition for building muscle. Unfortunately, new studies now indicate that not only is this not necessarily true, but that aminoacidemia may be a contributing factor in the onset of diabetes. Specifically, The American Journal of Clinical Nutrition has confirmed that whey's high Protein Digestibility Corrected Amino Acid Score actually ensures a rate of amino acid delivery that is *too rapid* to sustain the anabolic requirement during the postprandial period (the period right after a meal).

Again, we're talking about intentionally induced aminoacidemia through diet. For years bodybuilders have claimed this is a helpful condition for building muscle, and for several years now, this has been one of the main selling features of whey protein in the bodybuilding community. The rationale is that muscle growth is about staying in a positive nitrogen state. Exercise damages muscle, stresses it, and throws your body into a negative nitrogen catabolic (breakdown) state. And the best way to take yourself out of a catabolic state and into a positive nitrogen anabolic (building) state is to consume the fastest absorbing protein you can get your hands on -- whey. And there is no question that **whey protein induces a short-term dramatic increase in blood levels of amino acids** -- i.e. aminoacidemia. Unfortunately, new studies now indicate that this rationale, taken as a whole, may not necessarily be true.

Specifically, studies have confirmed the "paradox" of the highly soluble proteins found in whey and whey isolate, which, despite their high Protein Digestibility Corrected Amino Acid Score, ensure **a rate of amino acid delivery that is too rapid to sustain the body's anabolic requirement during the minutes and hours after consuming it** -- thus being counterproductive for the development of muscle. Or in simple terms, **aminoacidemia may not provide the benefit many bodybuilders think it does.**

But even worse, aminoacidemia may actually have long-term health consequences. One example is diabetes. Interestingly enough, short-term aminoacidemia can actually lower blood sugar levels since **it stimulates higher beta-cell secretion** and a concomitant increase in insulin levels (by as much as 40%). This, of course, significantly lowers blood sugar levels. However, over time, this **constant stimulation may overstress and degrade the ability of beta-cells to produce sufficient insulin when called for** and may ultimately, over time, contribute to pre-diabetic and diabetic conditions in the body.

In addition, excess amino acids are converted into carbon dioxide, water, and ammonia. Ammonia is toxic to the body and is a primary cause of premature fatigue. Normally, the body handles excess ammonia by converting it to urea then filtering it through the kidneys. But if the ammonia level is too high, it overburdens the kidneys. This is why doctors will insist on lower levels of protein intake in cases of kidney disease. And finally, although you can find studies all over the map on the question of high amino acid levels in the blood (i.e., high protein consumption) and bone loss, by far, **the most convincing studies indicate that there is a problem.**

For bodybuilders, the paradox of aminoacidemia says that the main virtue of whey, its high Protein Digestibility Corrected Amino Acid Score, probably produces a rate of amino acid delivery that is too rapid to sustain the anabolic requirement during the immediate hours after consuming it -- thus making it counterproductive for the development of muscle.

## Whey and Intestinal Toxemia

**Intestinal toxemia is not a medical condition.** It is more of a catchall phrase used in the alternative health community to describe a set of conditions that can arise in the intestinal tract as the result of improper dietary choices. It has three primary manifestations:

1. Putrefaction, which is caused by bacterial action on undigested proteins. Guanidine, histamine, mercaptans, indol, phenyl, skato, and other organic toxins may be formed as a result.
2. Rancidity refers specifically to the spoilage of fats. This can actually occur in the digestive tract itself -- not just from the consumption of rancid fats in the diet. The primary concern is that rancid fats promote the production of peroxide free radicals in the body.
3. Fermentation is caused by the action of bacteria and yeasts on carbohydrates. Excessive gas, increased blood alcohol levels (that's why excess sugar can give you a hangover), and Candida hyper-growth are just three problems associated with intestinal fermentation.

Intestinal toxemia occurs when large particles of undigested food enter the small intestine and colon. Since these parts of the digestive tract were not designed to handle excessive amounts of undigested food, the partially digested food mass becomes a fertile breeding ground for bacteria and yeast fermentation. Each nutrient degrades in its own unique way. Proteins putrefy, carbohydrates ferment, and fats become rancid due to the workings of intestinal bacteria. These bacteria then produce harmful by-products that damage the intestines, reduce nutrient assimilation, create excess gas and bloating, and lead to persistent diarrhea. On top of that, mild to intense stomach pains (the result of muscle cramping and excessive gas) accompany this process. Prolonged intestinal toxemia may be a major contributing factor in the onset of Irritable Bowel Syndrome and Crohn's Disease.

For a number of reasons, whey protein can be a major factor in promoting intestinal toxemia. **Whey contains no fiber**, which is necessary to keep things moving consistently through the intestinal tract. Because it is highly processed, whey protein contains no live enzymes to break down the large whey proteins. The human body actually has a hard time breaking down the three primary proteins in whey. Taken together, these problems provide an optimum environment for non-beneficial intestinal bacteria to thrive in. In addition, whey is very acid forming, which lowers the pH of the normally alkaline environment of the intestinal tract, thus favoring the growth of unfriendly bacteria over beneficial bacteria. Add Splenda and you have a toxic mess in the intestines.

### **Say NO WAY! To WHEY!**

**<http://www.notmilk.com/whey.html>**

- After fat and casein are removed from milk, dairy processors are left with whey protein. Whey is composed of bovine blood proteins. Serum albumen. Lactalbumen. Dead white blood cells. Hormonal residues including estrogen and progesterone.
- The body's reaction to a foreign protein is to destroy that antigen-like invader with an antibody. For those individuals unfortunate enough to possess a genetic pre-disposition to such an event, the antibody then turns upon one's own cells.
- That is what is known as an autoimmune response In the case of diabetes and Multiple Sclerosis (MS), the body's response to whey proteins is to attack the outer membrane protecting nerve cells, or the myelin sheath.
- It has long been established that early exposure to bovine proteins is a trigger for insulin dependent diabetes mellitus. Researchers have made that same milk consumption connection to MS. The July 30, 1992 issue of the New England Journal of Medicine first reported the diabetes autoimmune response milk connection:

- "Patients with insulin dependent diabetes mellitus produce antibodies to cow milk proteins that participate in the development of islet dysfunction... Taken as a whole, our findings suggest that an active response in patients with IDDM (to the bovine protein) is a feature of the auto-immune response."

On December 14, 1996, The Lancet revealed:

"Cow's milk proteins are unique in one respect: in industrialized countries they are the first foreign proteins entering the infant gut, since most formulations for babies are cow milk-based. The first pilot stage of our IDDM prevention study found that oral exposure to dairy milk proteins in infancy resulted in both cellular and immune response...this suggests the possible importance of the gut immune system to the pathogenesis of IDDM."

### **THE MULTIPLE SCLEROSIS/MILK CONNECTION**

- The April 1, 2001 issue of the Journal of Immunology contained a study linking MS to milk consumption.
- Michael Dosch, M.D., and his team of researchers determined that multiple sclerosis and type I (juvenile) diabetes mellitus are far more closely linked than previously thought. Dosch attributes exposure to cow milk protein as a risk factor in the development of both diseases for people who are genetically susceptible.

According to Dosch:

- "We found that immunologically, type I diabetes and multiple sclerosis are almost the same - in a test tube you can barely tell the two diseases apart. We found that the autoimmunity was not specific to the organ system affected by the disease. Previously it was thought that in MS autoimmunity would develop in the central nervous system, and in diabetes it would only be found in the pancreas. We found that both tissues are targeted in each disease."

### **MULTIPLE SCLEROSIS**

Multiple sclerosis affects approximately 300,000 Americans. Two-thirds of those diagnosed with MS are women. Most researchers believe that MS is an autoimmune disease. Auto means "self."

### **WHO DOES NOT GET MS?**

It is interesting to note that Eskimos and Bantus (50 million individuals living in East Africa) rarely get MS. Neither do those native North and South American Indian or Asian populations who consume no cow's milk or dairy products.

### **WHO GETS MS?**

- The British medical journal Lancet reported that dairy-rich diets filled have been closely linked to the development of MS. (The Lancet 1974; 2:1061)
- A study published in the journal Neuroepidemiology revealed an association between eating dairy foods and an increased prevalence of MS. (Neuroepidemiology 1992;11:304-12.)
- MS researcher, Luther Lindner, M.D., a pathologist at Texas A & M University College of Medicine, wrote:
  - "It might be prudent to limit the intake of milk and milk products."
- Dairy industry scare tactics that offer misinformation regarding osteoporosis targets women. Two-thirds of MS victims are women. As milk and cheese consumption increase along population lines, so too does an epidemic number of MS cases. The numbers add up. The clues add up. The science supports epidemiological studies. Got diabetes? Got MS? The milk connection has been established.

## ACID FORMING FOODS

<http://www.rawfoodexplained.com/acid-and-alkaline-substances/acid-and-alkaline-in-the-diet.html>

“When nutritionists talk about acid- or alkaline-forming foods, they are referring to the condition of the food after ingestion. There are many food substances, which are acidic in their natural form that becomes alkaline when broken down within the body.

A physical description of an acidic substance would be "sour or sharp to the taste buds." Litmus paper is a simple means to determine whether a substance is acidic. Acidic substances such as vinegar, lemon juice, grapefruit juice, tomato juice, tea, coffee or sour milk will all turn blue litmus paper red. The red coloration is an indication of the substances acidic characteristics. Alkaline substances, on the other hand, will cause red litmus paper to turn blue. However, when acid and alkaline substances are mixed together, they neutralize each other, forming water and salt.

Generally speaking, the metabolic processes of the breakdown of foods from the **vegetable kingdom change in character from acidic to alkaline**, while the foods from the animal world change from alkaline to acid during metabolism.

All foods contain within them a combination of both acid-forming and alkaline-forming elements. The particular influence a food will have on pH will be determined simply by which elements are dominant, the acid elements or the alkaline elements. These elements, when broken down, will either release (H<sup>+</sup>) ions, or thus create an acidic medium, or they will accept and combine with (H<sup>+</sup>) ions, creating an alkaline medium.

Keep in mind the following basic concepts:

- Organic matter is taken into the body in the form of food.
- This organic matter is broken down into simple compounds (monosaccharide's, amino acids, lipids etc.).
- After metabolism, these compounds leave an **acidic or alkaline residue in the body**.
- The simple compounds contain elements such as sulphur, potassium, sodium, magnesium and calcium. These minerals determine the H<sup>+</sup> concentration and thus the acidity or alkalinity of the body.

These elements are either **acid-forming elements or alkaline-forming elements**. The acid-forming substances are sulphur, phosphorus and chlorine, while the alkaline formers are sodium, potassium, calcium, magnesium and iron.

Most proteins contain sulphur, as well as phosphorus, within their chemical structures. When metabolized, these substances are broken down into phosphoric acid and sulphuric acid, which must then be neutralized through various chemical reactions. Another by-product of protein metabolism is uric acid. (Uric acid has been found to have a major influence on the development of arthritis; in particular, gouty arthritis.) Uric acid must be neutralized and excreted from the kidneys. Because of these toxic by-products of protein metabolism (phosphoric, sulphuric and uric acids), and for many other reasons not mentioned here, protein foods, and especially animal products, are acid forming. **Most grains and dairy products, also high in protein, are, like meats acid-forming.**

Within the plant kingdom, the organic acids found in fruits and vegetables are metabolized and eventually become carbon dioxide and water. The alkaline elements such as potassium, calcium, sodium and magnesium remain. Although **many fruits are acidic in nature, when broken down into their constituent elements, the acids are rendered neutral and the alkaline elements are dominant. Therefore, the end result of the organic breakdown and digestion of fruits and vegetables is alkaline in nature.**

Since we are constantly supplying acids and alkalines to our bodies through the various foods we eat, it is very important that we consider the balance between these two extremes. *If we consume excessive amounts of acid-forming foods, such as animal and dairy products, the body must tap its alkaline reserves (buffer salts) in order to maintain the proper pH. The kidneys, lungs and entire physiology are overworked in the process of excreting the neutralized acids from the body. This strain eventually leads to a depletion of buffer salts and the breakdown in the physiological functions of various organs, including the kidneys. Many different organ malfunctions are referred to as "disease," while the underlying cause, acidosis (due largely to faulty diet), has been overlooked. The point to keep in mind is that any food, drug or condiment that is extremely acidic in nature utilizes alkaline reserves and overworks the various organs. This type of dietary abuse may be tolerated for a period of time, but eventually the body will no longer be capable of handling this overload and will slowly begin to break down.*

Foods that are beneficial in maintaining body pH are fruits and vegetables (preferably in their raw form), plus unprocessed nuts and seeds.

The following rules will supply a conceptual basis from which to apply the dietary philosophy of Natural Hygiene.

#### *FOODS TO AVOID*

1. All animal foods.
2. **Dairy products, including milk, yogurt and cheese.**
3. Vinegar and various condiments.
4. Drugs (acidic and alkaline).
5. Refined and processed foods. (Many alkaline elements have been removed.)
6. Fats (found in both meat and dairy products)
7. Teas, coffee, cocoa and chocolate.

#### *FOODS TO EAT*

These should be fresh and unprocessed.

1. Uncooked vegetables.
2. Fresh fruits.
3. Unroasted nuts and seeds.

If you simply follow these rules, your body will benefit from a diet rich in all the essential proteins, fats, carbohydrates, vitamins and minerals. It will do this without having to deal with foods that deplete alkaline reserves and simultaneously overwork the buffer systems and organs of the body. These simple rules, combined with all the other areas of Natural Hygiene, will insure a condition in which your body can maintain a balanced state of health and well-being.

#### **Downfalls of Soy Protein**

- **Soy Protein Also Has Side Effects.** No need to worry about lactose-intolerance with soy, but **soy protein** is very high in allergens (some 28 different proteins present in soy have been found to bind to IgE antibodies). And, the more one eats it, the more likely one will develop allergies!
- **Soy Blocks Essential Minerals.** Soy blocks the absorption of important minerals such as calcium unless the **phytates** have been removed. This can be very hazardous to **athletes** or the **elderly** who are typically mineral deficient due to diet and lack of minerals in most fruits and vegetables.
- **Soy Can Disrupt Hormone Balances.** Soy contains high levels of phytoestrogens, which although beneficial in moderate amounts, can be counter-productive in large amounts -- particularly for children. Phytoestrogens have been linked to thyroid problems, tumors, infertility, and hormonal imbalances.

- **Low Protein Utilization.** Although soy's biological value is not bad at 70-80, its net **protein utilization** at 61 is quite low. In fact, unless it has been fermented, **soy protein contains potent enzyme inhibitors** that block the action of trypsin and other enzymes needed for **protein digestion**. This can create significant amounts of gas, in addition to promoting pathological conditions of the pancreas, including cancer.
- *\*As a side note, soy protein was once considered a waste product of the soy oil industry and used almost exclusively as cattle feed.*

### Downfalls of Isolated Rice Protein

- Rice Protein Alone is not an optimized protein. **Rice protein** is high in the amino acids cysteine and methionine, but tends to be low in lysine, which negatively impacts its bioavailability. If you can raise its lysine levels, you can dramatically increase its bioavailability. (The benefit of combining pea protein and rice protein with cranberry protein!)
- Most Rice Proteins Taste Chalky. Rice protein has a lot of health benefits; the pea protein provides a much smoother taste and texture. It is more expensive than rice protein, but needed for palatability.

### Splenda Destroys Your Gut Flora

<http://articles.mercola.com/sites/articles/archive/2011/04/26/major-media-finally-exposes-splendas-lies.aspx>

"Different artificial sweeteners have been found to wreak havoc in a number of different ways. Aspartame, for example, has a long list of studies indicating its harmful effects, ranging from brain damage to pre-term delivery. Splenda (sucralose) has been found to be particularly damaging to your intestines.

A study published in 2008 found that Splenda:

- Reduces the amount of good bacteria in your intestines by 50 percent.
- Increases the pH level in your intestines
- Affects a glycoprotein in your body that can have crucial health effects, particularly if you're on certain medications like chemotherapy, or treatments for AIDS and certain heart conditions

They also found unmistakable evidence that Splenda is absorbed by fat, contrary to previous claims.

In response to this study, James Turner, chairman of the national consumer education group Citizens for Health issued the following statement:

"The report makes it clear that the artificial sweetener Splenda and its key component sucralose pose a threat to the people who consume the product. Hundreds of consumers have complained to us about side effects from using Splenda and this study ... confirms that the chemicals in the little yellow package should carry a big red warning label."

I agree. It's truly disturbing that Splenda can destroy up to 50 percent of your healthy intestinal bacteria, as these bacteria are absolutely vital for supporting your general health! Many people are already deficient in healthy bacteria due to consuming too many highly processed foods. This is why a high quality probiotic is one of the very few supplements I highly recommend for most, if not all, people. Believe me, if you continually destroy up to half of your gut flora by regularly consuming Splenda, then poor health is virtually guaranteed!"



## COST OF QUALITY PROTEIN:

Many people think that protein is protein. But of course we know that this is not true. You can buy low-end hydrolyzed (chemically processed) protein for cheap that is low quality, and has a low assimilation rate and causes intestinal disturbances and tastes like garbage. Or you can buy a natural process high quality protein that has a high absorption rate and easy to digest, has high efficacy and health value and tastes great. Your choice - you get what you pay for. Also, in my opinion there are too many body builders and athletes that take so much protein and yet they do not assimilate the protein that they have taken in. After all, its all about digestion and assimilation. Because Arbonne is predigested with bio fermentation and enzymes it has 98 to 99% digestion efficiency. That means that you do not need to take, as much to get the results you need. Third, Arbonne's is a functional food or in other words a food that is nutritious and tastes good but also has awesome healing properties. Here are some more reasons to use Arbonne's:

1. Arbonne's is Naturally Rich in Vitamins and Minerals, Arbonne's protein contains high amounts of antioxidants and other essential nutrients – such as thiamin, iodine, riboflavin, niacin, and potassium.
2. There is currently a clinical trial, which shows promise that ***Rice Protein aids in the absorption of vitamins.*** There has been a direct correlation between the use of Rice Protein and the ***absorption of vitamins in AIDS patients*** where other proteins do not provide such synergistic affects during the intake.
3. Weight Loss-Clinical studies in Japan have showed that by providing Rice Protein as a staple in a diet, that it can be used as a weight control vehicle. Especially, because of the superior absorption rates.
4. Diabetes- there are Clinical Studies going on now which show that because of the balanced nutritional profile of rice, it helps to actually maintain the diabetic affects of sugars, which could be used in diabetic products to help control insulin levels.
5. Cholesterol-Clinical studies have shown promise that rice protein has cholesterol lowering potential and the USDA is currently using Rice Protein in trials to see if it may help control high blood pressure.

## BENEFITS OF ARBONNE'S VEGAN PROTEIN (Pea + Rice + Cranberry)

### Benefits

- High protein content
- No cholesterol
- Low glycemic index
- Does not contribute to aminoacidemia – kidney stones or fatty liver
- Hypoallergenic
- No burping
- No bloating or gas
- No constipation
- No indigestion
- No allergies
- No estrogens
- No antibiotics
- No GMO's
- Optimized amino acid profile
- High biological value - high bioavailability
- Enhanced digestion factors
- Augmented muscle energy
- Increased nitric oxide production – decreases blood pressure
- Reduced lactic acid and ammonia build up
- Improved ATP and phosphocreatine recovery (Krebs's Cycle)
- Train harder & work out longer
- Gluten-Free
- Used in a Detoxification Diet – safely eliminate toxins stored in fat.

**Dr. Kelly Martin, B.S., Pharm.D.**

**Arbonne International Independent Consultant**

# Consumer Reports - July 2010 Issue

## Alert: Your Protein Drink May Contain Toxic Heavy Metals

### With Arbonne's Vegan-Certified Shakes get 20g of Protein – None of the Worry!

- 15 of some of the most popular protein drinks sold in retail stores were tested by the Consumer Reports team.
  - Based on the chart below, here's what they found: All of them have arsenic, 9 have cadmium, **11 have lead, 6 have mercury - and 3 are over the maximum limits proposed by the U.S Pharmacopeia!**
- **Robert Wright, M.D., associate professor at Harvard Medical School**, who is conducting research on the health effects of exposure to toxic metals, says:
  - Not only can these metals pose a danger on their own, **“being exposed simultaneously to a mixture of toxins can also potentially increase health risks, particularly when they target the same organs or systems as some metals we detected do.”**
  - He also states that 2 toxic substances together can pose even greater risks than the sum of the two and not enough research has been done to determine whether that occurs from **multiple exposures to even relatively low levels of those heavy metals.**

### What's in your protein drink

Here are the average amounts of metals we found in three servings of these protein drinks. The maximum limits for them in dietary supplements proposed by U.S. Pharmacopeia are: **arsenic** (inorganic), 15 micrograms (µg) per day; **cadmium**, 5 µg; **lead**, 10 µg; **mercury**, 15 µg. Amounts at or exceeding those limits are in **bold**. Experts said three servings a day is common.

Products are listed in alphabetical order.

Product (powder unless otherwise indicated)	Amount in 3 servings	Protein (g/3 servings)	Test results			
			Arsenic (µg/3 servings)	Cadmium (µg/3 servings)	Lead (µg/3 servings)	Mercury (µg/3 servings)
BSN Core Series Lean Dessert Protein Shake Chocolate Fudge Pudding	105 g	63	3.3	3.7	2.5	0.3*
BSN Core Series Syntha-6 Ultra Chocolate Milkshake	132 g	66	4.2	2.6	5.4	1.1
Designer Whey 100% Whey Protein Chocolate	78 g	54	3.9	1.6	2.4	0.9
EAS Myoplex Original Rich Dark Chocolate Shake (liquid)	1,500 mL	126	<b>16.9</b>	<b>5.1*</b>	-	-
GNC Lean Shake Chocolate	144 g	27	7.0	3.9	4.9	-
GNC Pro Performance AMP Amplified Wheyabolic Extreme 60 Chocolate	237 g	180	5.4	2.5	2.5	-
Jillian Michaels Natural Whey Protein Vanilla Cream Shake	81 g	45	1.9	-	1.2	-
Muscle Milk Chocolate	210 g	96	12.2	<b>5.6</b>	<b>13.5</b>	0.7*
Muscle Milk Nutritional Shake Chocolate (liquid)	990 mL	66	14.3	-	6.8	-
Muscle Milk Vanilla Crème	210 g	96	11.2	2.0	<b>12.2</b>	-
MuscleTech Nitro-Tech Hardcore Pro-Series Vanilla Milkshake	96 g	75	1.2	-	0.4*	0.9
Optimum Nutrition Gold Standard 100% Whey Extreme Milk Chocolate	96 g	72	2.5	1.7	1.0	0.2*
Optimum Nutrition Platinum Hydro Whey Velocity Vanilla	117 g	90	1.5	-	-	-
Six Star Muscle Professional Strength Whey Protein French Vanilla Cream	117 g	78	2.3	-	-	-
Solgar Whey to Go Whey Protein Powder Natural Vanilla Bean	60 g	48	0.6*	-	-	-

(-) Element was not measurable in all samples tested.

\*In some samples of this product, this metal was below measurable levels and could be as low as zero. For those products, the average was calculated using zero as the value for samples in which metal could not be measured by the analytical method used.

# **Just off the top of my head**

**WHEY PROTEIN (Isagenix, Advocare, Shakeology, and a portion of Visalus)**

**Downfalls of Soy Protein (Herbalife, Juice Plus, portion of Visalus)**

**Downfalls of Isolated Rice Protein (New Shakeology Vegetarian Shake)**

**Splenda Destroys Your Gut Flora (Visalus, Advocare)**